IN THE CLAIMS

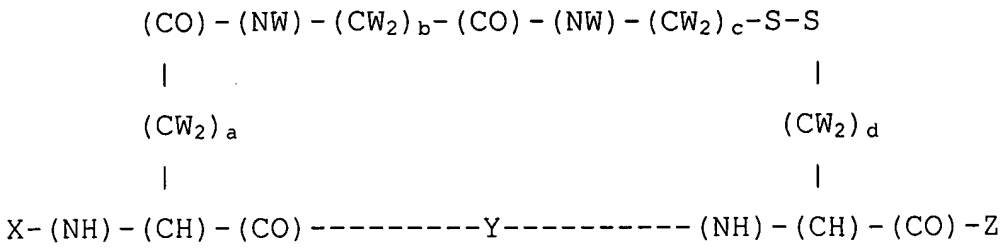
Claim 1 (original): Peptidic compounds having covalently closed bridge structures, which branch off from suitable amino acid side chains of a peptide with alpha-helical conformation and which connect at least two amino acid side chains of this peptide which are located at positions i and i+ 7 of the amino acid sequence of the peptide, thereby stabilizing the bridged part of the helix, wherein the bridge backbone, including the side chain atoms of amino acids i and i + 7 of the peptide, consists of one or two amide (peptide) bonds, one disulfide bridge and further 7 to 11, preferably 9 C- or N-atoms.

Claim 2 (original): Peptidic compounds according to claim 1, wherein the bridge backbone comprises two amide (peptide) bonds, one sulfide bridge and further 7 carbon atoms.

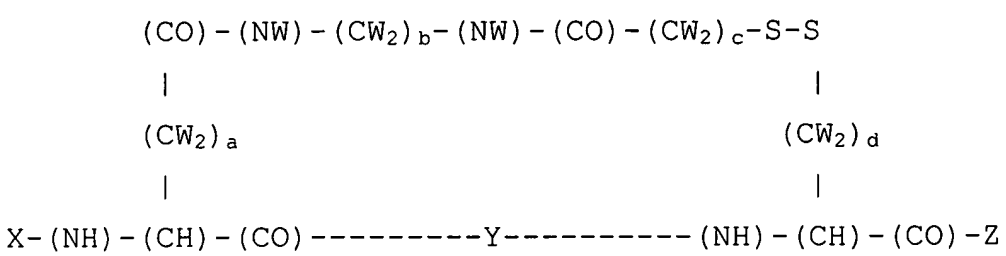
Claim 3 (currently amended): Peptidic compounds according to ~~claims 1 and/or 2~~ claim 1, wherein the bridge is stabilized by hydrogen bonds between one or more amino acid side chain(s) of the peptide and the bridge, and the stabilizing amino acid(s) is/are selected from lysine, arginine, asparagine, glutamine, aspartic acid, glutamic acid, serine, threonine, thyrosine or histidine and is/are located at position(s) i + 3 and/or i + 4 of the peptides.

Claim 4 (original): Peptidic compounds according to claim 3, wherein the stabilizing amino acid(s) is/are aspartate at position i + 3, and/or lysine or glutamine at position i + 4.

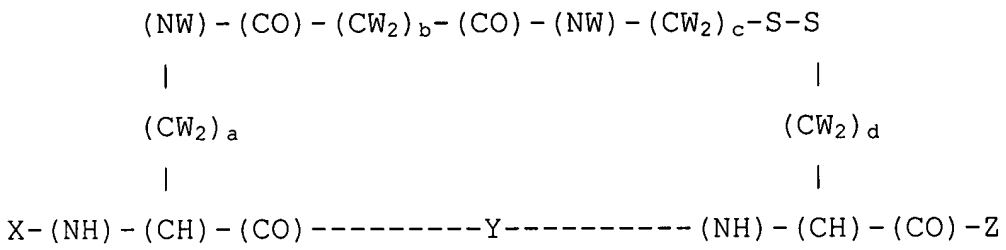
Claim 5 (currently amended): Peptidic compounds according to ~~claims 1-4~~ claim 1, and represented by the molecules covered by one of the formulas (1a) - (1d):



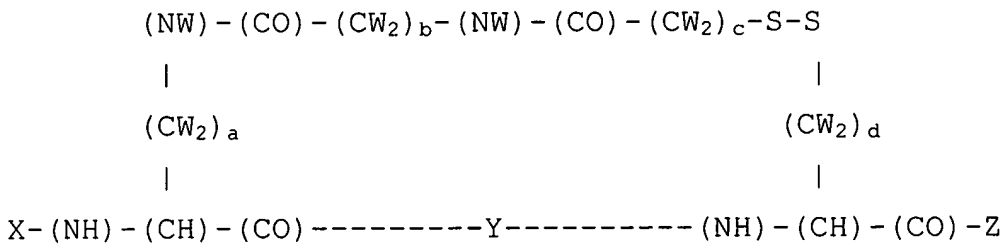
(1a)



(1b)



(1c)

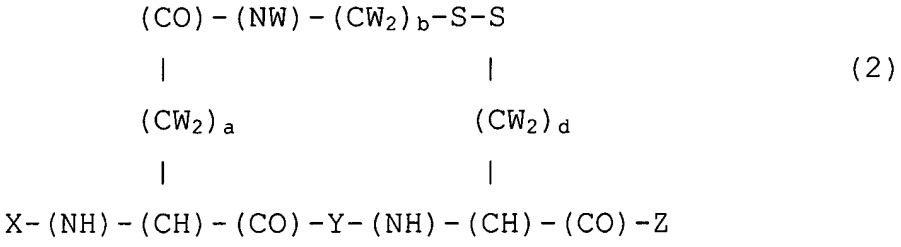


(1d)

wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1), (2) or (3), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by formula (1), (2) or (3); a, b, c and d are independently selected from the integers 1 to 3, provided that the sum a+b+c+d is 7, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or

amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule, and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

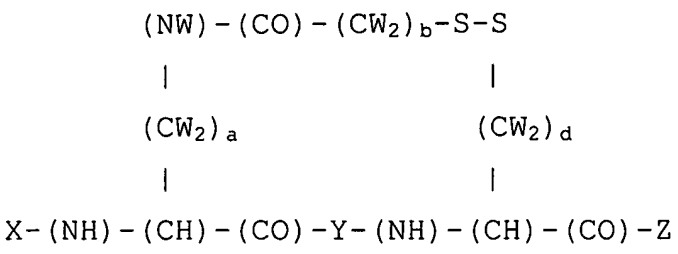
Claim 6 (currently amended): Peptidic compounds according to claim ~~1-4~~ 1, and represented by the molecules covered by the generic formula (2):



(2)

wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1), (2) or (3), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by formula (1), (2) or (3), a, b and d are independently selected from the integers 1 to 5, provided that a+b+d is 9; at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule, and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

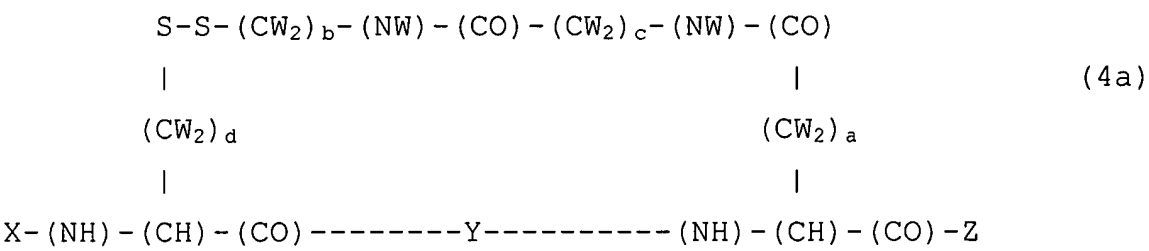
Claim 7 (currently amended): Peptidic compounds according to claim ~~1-4~~ 1, and represented by the molecules covered by the generic formula (3):



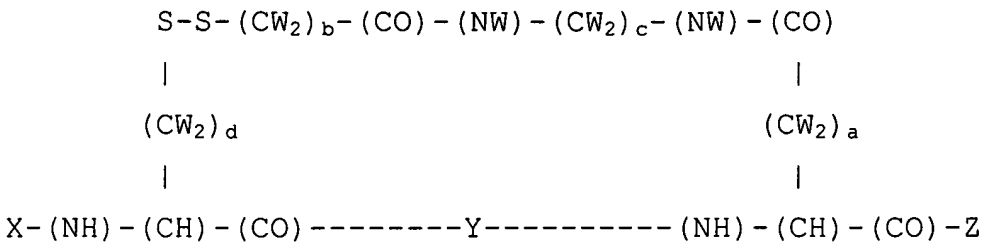
(3)

wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1), (2) or (3), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by formula (1), (2) or (3), a, b and d are independently selected from the integers 1 to 5, provided that a+b+d is 9, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule, and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

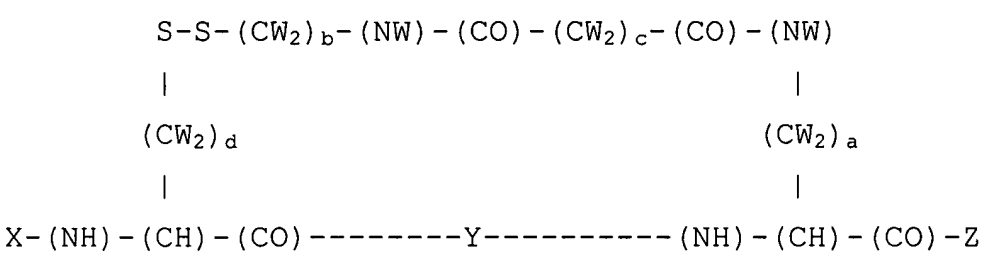
Claim 8 (currently amended): Peptidic compounds according to claim ~~1-4~~ 1, and represented by the molecules covered by one of the formulas (4a) - (4d):



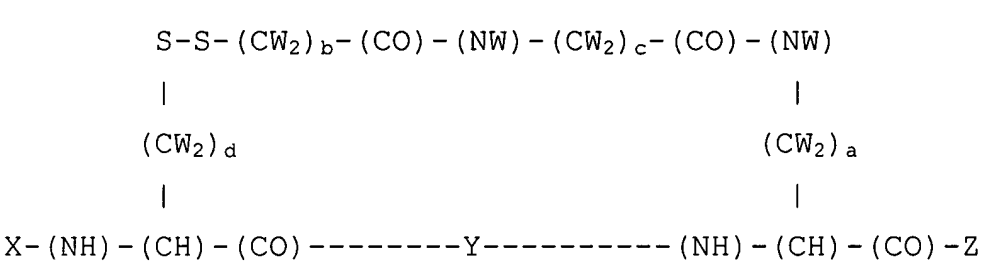
(4a)



(4b)



(4c)

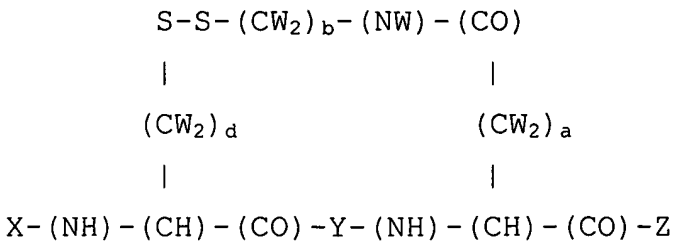


(4d)

wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1) to (2), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by formula (1) to (6), a, b, c and d are independently selected from the integers 1 to 3, provided that a+b+c+d is 7, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule, and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

Claim 9 (currently amended): Peptidic compounds according to claim ~~1-4~~ 1, and represented by the molecules covered by the generic

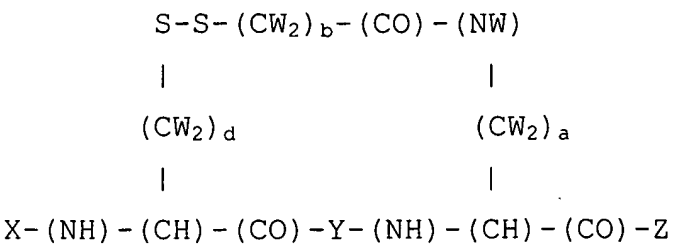
formula (5):



(5)

wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1) to (6), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by formula (1) to (6), a, b and d are independently selected from the integers 1 to 5, provided that a+b+d is 9, W is hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a peptide of maximally 30 amino acids, a polyethyleneglycol moiety, or a naturally occurring or artifical sugar molecule and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

Claim 10 (currently amended): Peptidic compounds according to claim ~~1-4~~ 1, and represented by the molecules covered by the generic formula (6):

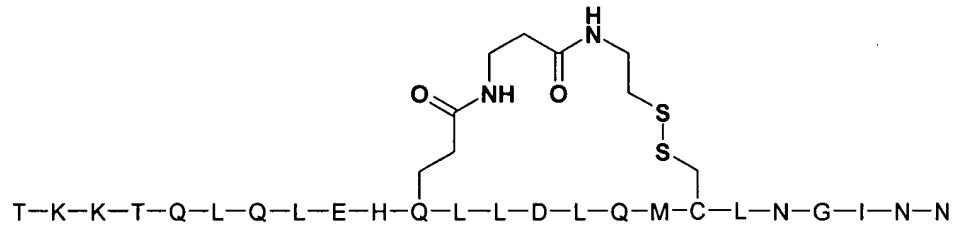


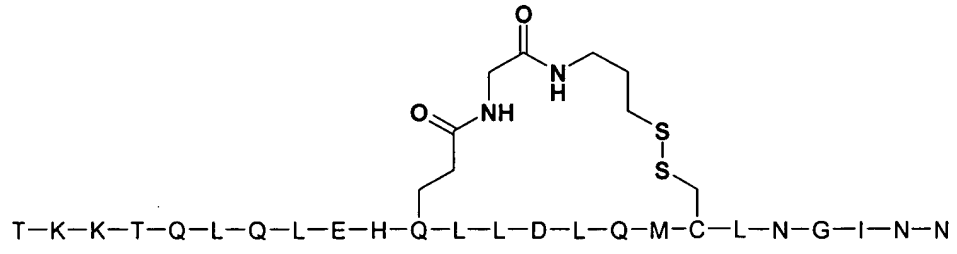
(6)

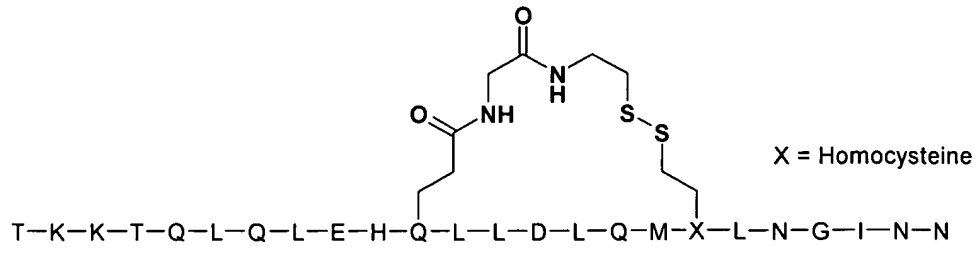
wherein X is hydrogen or any amino acid or any peptide or any compound represented by formula (1) to (6), Y is any amino acid sequence consisting of six amino acids, Z is hydroxyl or any amino acid or any peptide or any compound represented by

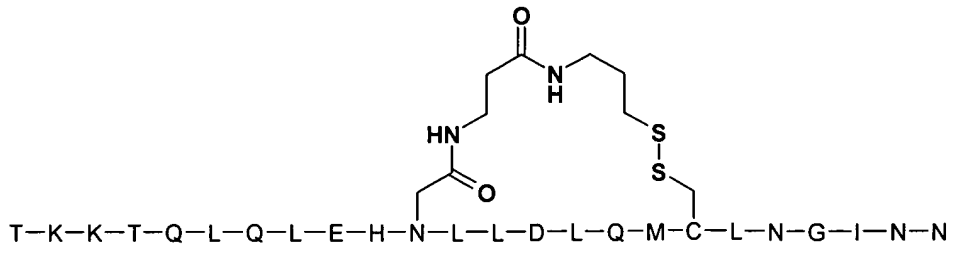
formula (1) to (6), a, b and d are independently selected from the integers 1 to 5, provided that a+b+d is 9, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule, and the peptides can consist of natural and/or unnatural D- and/or L-amino acids.

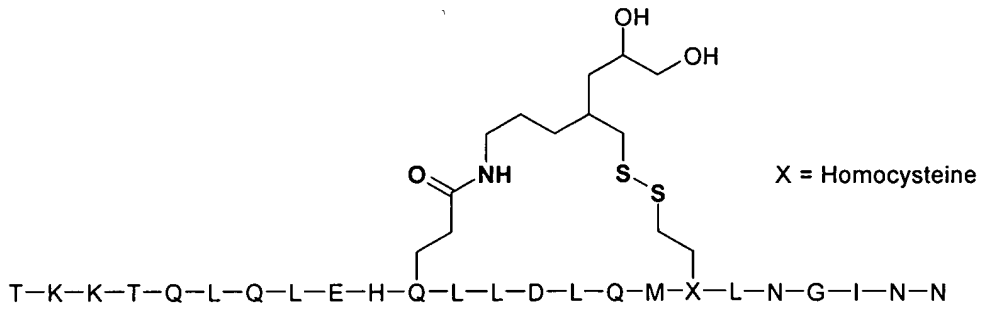
Claim 11 (currently amended): Peptidic compounds according to ~~claims 1-10~~ claim 1, binding to the interleukin 2 receptor and containing the stabilized peptide sequence TKKTQLQLEHKLLDLQMXLNGINN in a helical conformation, where X stands for homocysteine and two helical turns are bridged by a backbone according to ~~claims 1-10~~ claim 1; thereby including non-exclusively the sequences and structures (a- f) as follows:

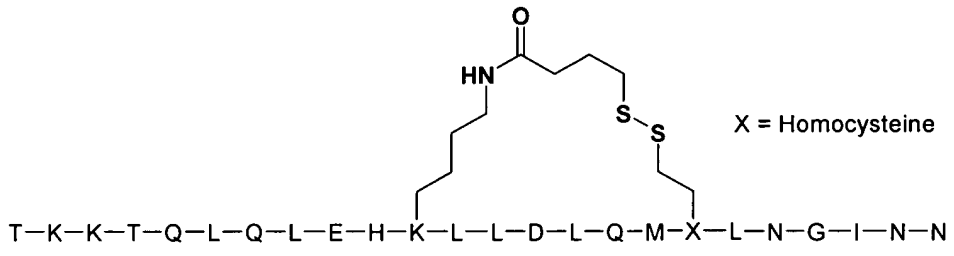
a) 

b) 

c) 

d) 

e) 

f) 

Claim 12 (original): Peptidic compounds according to claim 11, in which the bridging structure is shifted along the peptide sequence in such a way that binding to the interleukin 2 receptor is maintained and another part of the overall helical structure is bridged by the construct.

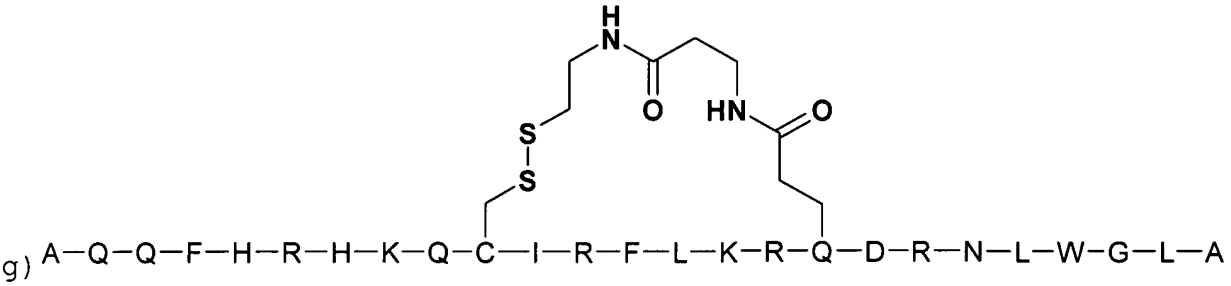
Claim 13 (currently amended): Peptidic compounds according to ~~claims 11 and 12~~ claim 11, in which at least one amino acid of the peptide sequence is replaced by physicochemically related natural or non-natural amino acids in a conservative exchange, which maintains the binding of the peptide to the Interleukin 2 Receptor.

Claim 14 (currently amended): Peptidic compounds according to ~~claims 11-13~~ claim 11, which are N- and/or C-terminally

modified in such a way that the binding of the peptide to the Interleukin 2 receptor is maintained and/or water solubility is improved and/or that exopeptidases can not cleave at the terminal sites, whereby terminal modifications include non-natural amino acids, D-amino acids, sugar moieties or freely chosen appropriate organic moieties.

Claim 15 (currently amended): Pharmaceutical preparations containing an active ingredient according to ~~claims 11-14~~ claim 11 and intended for use in humans or animals as an antagonist of the action of the cytokine Interleukin 2.

Claim 16 (currently amended): Peptidic compounds according to ~~claims 1-10~~ claim 1, binding to the interleukin 4 receptor and containing the stabilised peptide sequence AQQFHRHQCIRFLKRQDRNLWGLA in a helical conformation, wherein two helical turns are bridged by a backbone according to claims 1-10; thereby including non-exclusively the following sequence and structure (g):



Claim 17 (original): Peptidic compounds according to claim 16, in which the bridging structure is shifted along the peptide sequence in such a way that binding to the interleukin 4 receptor is maintained and another part of the overall helical structure is bridged by the construct.

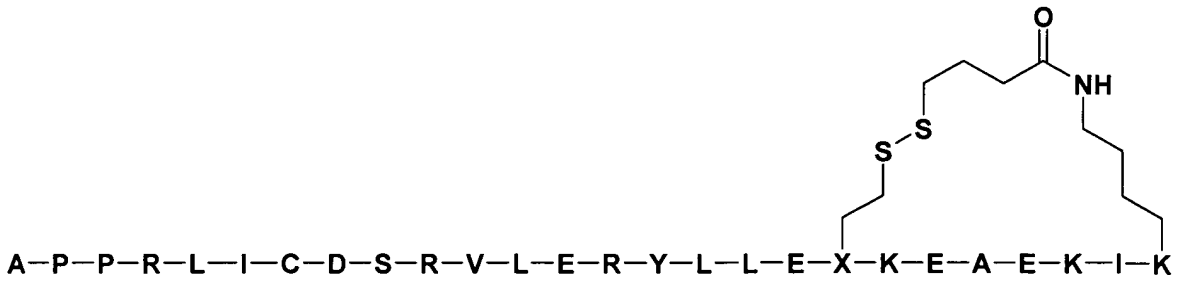
Claim 18 (currently amended): Peptidic compounds according to ~~claims 15-16~~ claim 16, in which at least one amino acid of the peptide sequence is replaced by physicochemically related

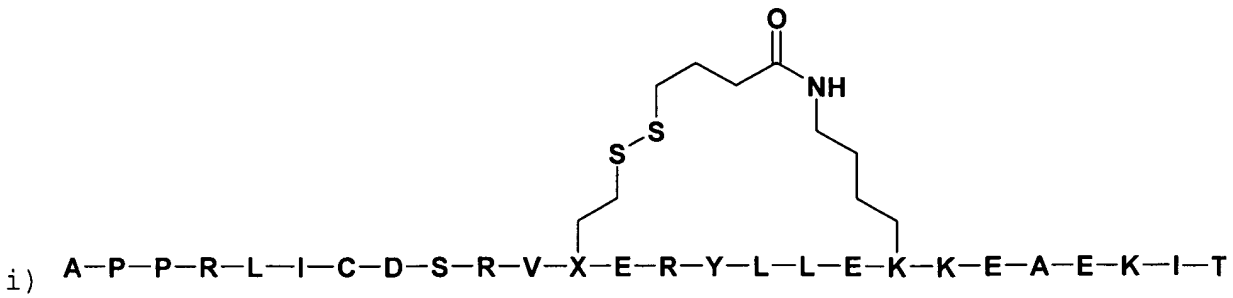
natural or non-natural amino acids in a conservative exchange, which maintains the binding of the peptide to the Interleukin 4 receptor.

Claim 19 (currently amended): Peptidic compounds according to ~~claims 16-18~~ claim 16, which are N- and/or C-terminally modified in such a way that the binding of the peptide to the Interleukin 4 receptor is maintained and/or water solubility is improved and/or that exopeptidases can not cleave at the terminal sites, whereby terminal modifications include non-natural amino acids, D-amino acids, sugar moieties or freely chosen appropriate organic moieties.

Claim 20 (currently amended): Pharmaceutical preparations containing an active ingredient according to ~~claims 16-18~~ claim 16 and intended for use in humans or animals as an antagonist of the action of the cytokine Interleukin 4.

Claim 21 (currently amended): Peptidic compounds according to ~~claims 1-10~~ claim 1, binding to the erythropoietin receptor and containing the stabilised peptide sequence APPRLICDSRVLERYLLEXKEAEKIK in a helical conformation, wherein two helical turns are bridged by a backbone according to ~~claims 1-13~~ claim 1; thereby including non-exclusively the following sequences and structures (h-i):

h) 



Claim 22 (original): Peptidic compounds according to Claim 21, in which the bridging structure is shifted along the peptide sequence in such a way that binding to the erythropoietin receptor is maintained and another part of the overall helical structure is bridged by the construct.

Claim 23 (currently amended): Peptidic compounds according to ~~claims 21-22~~ claim 21, in which at least one amino acid of the peptide sequence is replaced by physicochemically related natural or non-natural amino acids in a conservative exchange, which maintains the binding of the peptide to the erythropoietin receptor.

Claim 24 (currently amended): Peptidic compounds according to ~~claims 21-23~~ claim 21, which are N- and/or C-terminally modified in such a way that the binding of the peptide to the erythropoietin receptor is maintained and/or water solubility is improved and/or that exopeptidases can not cleave at the terminal sites, whereby terminal modifications include non-natural amino acids, D-amino acids, sugar moieties or freely chosen appropriate organic moieties.

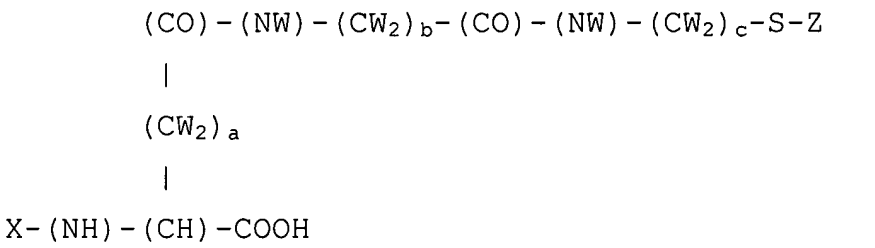
Claim 25 (currently amended): Pharmaceutical preparations containing an active ingredient according to ~~claims 16-19~~ claim 16 and intended for use in humans or animals as an agonist of the action of the cytokine erythropoietin.

Claim 26 (currently amended): Mono- and polyclonal antibodies to

the substances covered by ~~Claims 1-25~~ claim 1, and the use of such antibodies in diagnostic and pharmacological quantification and/ or inhibition of action of the active substances in body fluids or tissues of animals or humans.

Claim 27 (currently amended): Peptidic compounds according to ~~claims 1-14, 16-19 and/or 21-24~~ claim 1, in which the N-terminal amino acid is acetylated and/or the C-terminal amino acid is amidated.

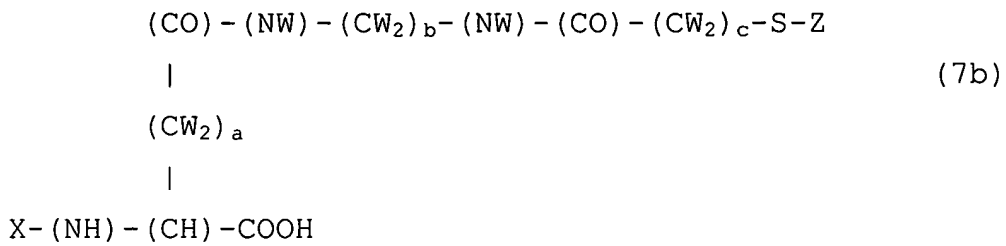
Claim 28 (currently amended): Use of a compound according to the generic formula (7a):



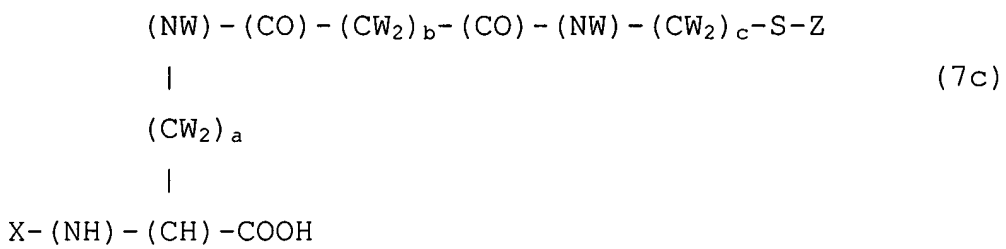
(7a)

as building block for the synthesis of peptidic compounds of ~~any of claims 1-14, 16-19 and/or 21-24~~ claim 1, wherein X or Z are hydrogen or any protecting group; a, b, and c are independently selected from the integers 1 to 3, provided that the sum a+b+c is an integer from 3 to 6, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule.

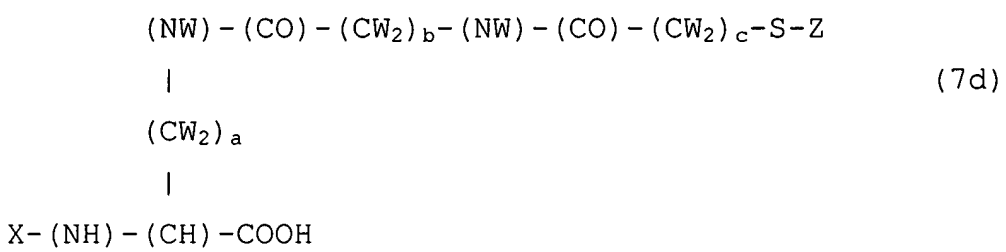
Claim 29 (currently amended): Compounds as building blocks for the synthesis of peptidic compounds of ~~any of claims 1-14, 16-19 and/or 21-24~~ claim 1, represented by the molecules covered by the generic formulas (7b) to (7d):



(7b)



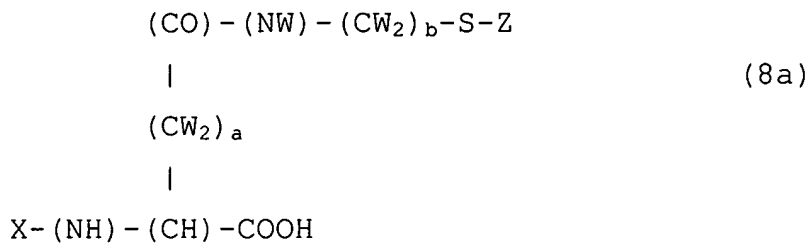
(7c)



(7d)

wherein X and Z are hydrogen or any protecting group; a, b, and c are independently selected from the integers 1 to 3, provided that the sum a+b+c is an integer from 3 to 6, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule.

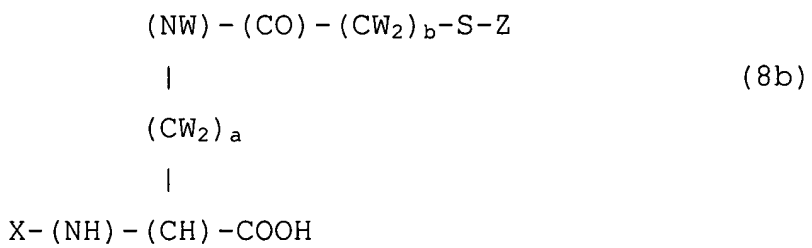
Claim 30 (currently amended): Use of a compound according to formula (8a):



(8a)

as building block for the synthesis of peptidic compounds of any of ~~claims 1-14, 16-19 and/or 21-24~~ claim 1, wherein X and Z are hydrogen or any protecting group; a and b are independently selected from the integers 1 to 5, provided that the sum a+b is an integer from 2 to 8, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule.

Claim 31 (currently amended): Compounds as building blocks for the synthesis of peptidic compounds of ~~any of claims 1-14, 16-19 and/or 21-24~~ claim 1, represented by the formula (8b):

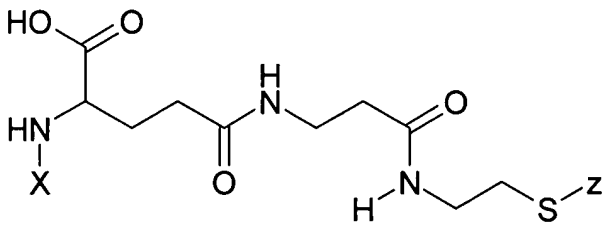


(8b)

wherein X and Z are hydrogen or any protecting group; a and b are independently selected from the integers 1 to 5, provided that the sum a+b is an integer from 2 to 8, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at

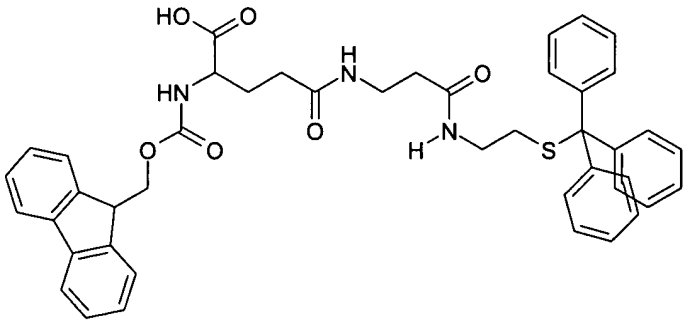
least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule.

Claim 32 (original): Use according to claim 28 of the formula (9), wherein X and Z are hydrogen or any protecting group:



(9)

Claim 33 (original): Use according to claim 32 of the formula (10):



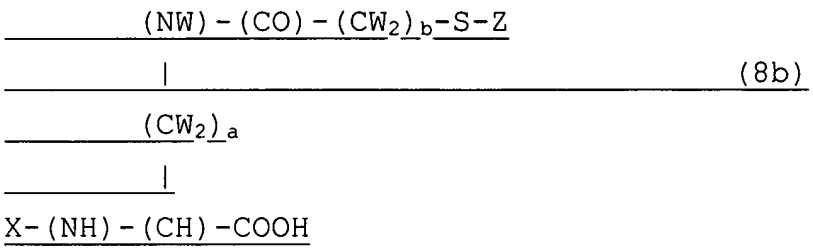
(10)

Claim 34 (currently amended): Methods for synthesis of building blocks according to ~~claims 29 and 31~~ claim 29 via solid phase synthesis.

Claim 35 (currently amended): Methods for synthesis of peptidic compounds according to ~~claims 1-14, 16-19 and/or 21-24~~ claim 1 comprising the following steps:

a. Synthesizing an intermediate peptidic compound by means of peptide synthesis from C- to N-term, comprising

introduction of an amino acid containing a protected SH function in its side chain at position *i+7* (i.e. introduction after deprotection of the N-term of the amino acid at position *i+8*), followed by the introduction of six amino acids at positions *i+6* to *i+1*, and furthermore followed by introduction of a building block ~~according to claims 31-34~~ at position *i* (i.e. after deprotection of the N-term of the amino acid at position *i+1*) of the growing peptide chain, the building block being represented by the formula (8b):



(8b)

wherein X and Z are hydrogen or any protecting group; a and b are independently selected from the integers 1 to 5, provided that the sum a+b is an integer from 2 to 8, at each independent position of W, W can be freely chosen from hydrogen, a hydroxyl-, carboxyl- or amino group, an alkyl moiety with at least one hydroxyl-, carboxyl- or amino group, a polyethyleneglycol moiety, or a naturally occurring or artificial sugar molecule,

b. continuation of the peptide synthesis until the N-terminal amino acid was introduced,
c. removal of the remaining protecting groups,
d. establishing helix-stabilizing conditions, for example with appropriate fluorinated solvents,

obtaining the peptidic compound by closure of a disulfide bridge with appropriate reagents under these helix-stabilizing conditions.